

WHAT IS CLAIMED IS:

1. An isolated Slit-N polypeptide.

5 2. A Slit-N polypeptide according to claim 1, wherein the Slit-N polypeptide is selected from an hSlit-1-N, an hSlit-2-N and an hSlit-3-N polypeptide

3. A Slit-N polypeptide according to claim 1, contained in a pharmaceutical composition.

10 4. A Slit-N polypeptide according to claim 1, made by expressing a Slit protein in a cell, whereby the Slit protein is proteolytically processed to form the Slit-N polypeptide.

15 5. A recombinant polynucleotide comprising a coding region encoding a Slit-N polypeptide according to claim 1, said coding region flanked by fewer than 500 nucleotides of native flanking sequence.

6. A pharmaceutical composition comprising a therapeutically effective amount of a Slit-N polypeptide according to claim 1, and a pharmaceutically acceptable excipient.

20 7. A pharmaceutical composition comprising a therapeutically effective amount of a Slit-N polypeptide according to claim 1, and a pharmaceutically acceptable excipient, wherein the Slit-N polypeptide is selected from an hSlit-1-N, an hSlit-2-N and an hSlit-3-N polypeptide

25 8. A pharmaceutical composition comprising a therapeutically effective amount of a Slit-N polypeptide according to claim 1, and a pharmaceutically acceptable excipient, further comprising a therapeutically effective amount of a neuroactive agent other than the Slit-N polypeptide.

9. A pharmaceutical composition comprising a therapeutically effective amount of a Slit-N polypeptide according to claim 1, and a pharmaceutically acceptable excipient, further

comprising a therapeutically effective amount of a neuroactive agent other than the Slit-N polypeptide, wherein the agent is NGF.

10. A method of promoting axon branching or sprouting, comprising contacting a neuron with a
5 composition comprising an effective amount of a Slit-N polypeptide according to claim 1.

11. A method of treating a neuropathy comprising administering a composition comprising a
therapeutically effective amount of a Slit-N polypeptide according to claim 1.